Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) ~~An~~ A regulatable aptazyme ~~construct~~ oligonucleotide comprising a ~~regulatable~~ Group I intron oligonucleotide and an aptamer oligonucleotide ~~sequence having a regulatory domain~~, wherein the kinetic parameters of the ~~aptazyme on a target gene~~ Group I intron oligonucleotide vary in response to the interaction of an allosteric effector molecule with the ~~regulatory domain~~ aptamer oligonucleotide.

2. (Currently Amended) The regulatable aptazyme ~~construct~~ of claim 1, wherein the aptamer comprises RNA.

3. (Currently Amended) The regulatable aptazyme ~~construct~~ of claim 1, wherein the aptamer comprises DNA.

4. (Currently Amended) The regulatable aptazyme ~~construct~~ of claim 1, wherein the aptazyme is at least partially single stranded.

5. (Currently Amended) The regulatable aptazyme of ~~construct~~ claim 1, wherein the aptazyme is at least partially double stranded.

6. (Cancelled)

7. (Currently Amended) The regulatable aptazyme of ~~construct~~ claim 1, wherein the ~~construct~~ aptazyme comprises the oligonucleotide sequence of SEQ ID NO: 2: GCC TGA GTA TAA GGT GAC TTA TAC TTG TAA TCT ATC TAA ACG GGG AAC CTC TCT AGT AGA CAA TCC CGT GCT AAA TTA TAC CAG CAT CGT CTT GAT GCC CTT GGC AGA TAA ATG CCT AAC GAC TAT CCC TT or an oligonucleotide sequence that hybridizes under stringent conditions to a hybridization probe the nucleotide sequence of which comprises the sequence of SEQ ID NO: 2 or an oligonucleotide that is complementary or antisense to such a probe.

8. – 11. (Cancelled)

12. (Currently Amended) The regulatable aptazyme ~~construct~~ of claim 1, wherein the effector molecule is endogenous.

13. (Currently Amended) The regulatable aptazyme ~~construct~~ of claim 1, wherein the effector molecule is exogenous.

14. (Currently Amended) The regulatable aptazyme ~~construct~~ of claim 1, wherein the effector molecule comprises theophylline.

15. (Currently Amended) An allosterically regulatable aptazyme ~~construct~~ oligonucleotide comprising a ~~regulatable~~ Group I intron oligonucleotide and an aptamer oligonucleotide ~~having an allosterically regulatable regulatory domain~~, wherein the kinetic parameters of the ~~aptazyme on a target gene~~ Group I intron oligonucleotide vary in response to the interaction of an allosteric effector molecule with the ~~regulatory domain~~ aptamer oligonucleotide and the intron splicing reaction occurs in vitro.

16. (Currently Amended) The allosterically regulatable aptazyme ~~construct~~ of claim 15, wherein the aptamer oligonucleotide comprises RNA.

17. (Currently Amended) The allosterically regulatable aptazyme ~~construct~~ of claim 15, wherein the aptamer oligonucleotide comprises DNA.

18. (Currently Amended) The allosterically regulatable aptazyme ~~construct~~ of claim 15, wherein the aptazyme is at least partially single stranded.

19. (Currently Amended) The allosterically regulatable aptazyme of ~~construct~~ claim 15, wherein the aptazyme is at least partially double stranded.

20. (Cancelled)

21. (Currently Amended) The allosterically regulatable aptazyme of ~~construct~~ claim 15, wherein ~~the construct~~ said aptazyme comprises the oligonucleotide sequence of SEQ ID NO: 2: GCC TGA GTA TAA GGT GAC TTA TAC TTG TAA TCT ATC TAA ACG GGG AAC CTC TCT AGT AGA CAA TCC CGT GCT AAA TTA TAC CAG CAT CGT CTT GAT GCC CTT GGC AGA TAA ATG CCT AAC GAC TAT CCC TT or an oligonucleotide sequence that hybridizes under stringent conditions to a hybridization probe the nucleotide sequence of which comprises the sequence of SEQ ID NO: 2 or an oligonucleotide that is complementary or antisense to such a probe.

22. –25. (Cancelled)

26. (Currently Amended) The allosterically regulatable aptazyme ~~construct~~ of claim 15, wherein the effector molecule is endogenous.

27. (Currently Amended) The allosterically regulatable aptazyme ~~construct~~ of claim 15, wherein the effector molecule is exogenous.

28. (Currently Amended) The allosterically regulatable aptazyme ~~construct~~ of claim 15, wherein the effector molecule comprises theophylline.

Amendments to the Drawings:

The attached four (4) sheets of drawings include changes to Figures 1, 2a, 2b and 3. The first sheet, which includes Figure 1, replaces the original sheet including Figure 1. Figure 1 has been amended to include a sequence identifier tag (*i.e.*, "SEQ ID NO:7"), which corresponds to the nucleic acid sequence shown therein. The second sheet, which includes Figure 2a, replaces the original sheet including Figure 2a. Figure 2a has been amended herein to include a sequence identifier tag (*i.e.*, "SEQ ID NO:8"), which corresponds to the nucleic acid sequence shown therein. The third sheet, which includes Figure 2b, replaces the original sheet including Figure 2b. Figure 2b has been amended to include a sequence identifier tag (*i.e.*, "SEQ ID NO:9"), which corresponds to the nucleic acid sequence shown therein. The fourth sheet, which includes Figure 3, replaces the original sheet including Figure 3. Figure 3 has been amended to include a sequence identifier tags (*i.e.*, "SEQ ID NO:10; SEQ ID NO:11 and SEQ ID NO:12"), which correspond to the nucleic acid sequences shown therein.

Attachments: Replacement Sheets (Figures 1, 2a, 2b and 3)
Annotated Sheets (Figures 1, 2a, 2b and 3) Showing Changes.